For procedural characteristics, stent diameter, total stent length, and number of stents used were similar between the two groups (6.6±0.5 mm vs. 6.8±0.4 mm, p=0.09, 179±131 mm vs. 167±112 mm, p=0.73, and 2.0±1.2 vs. 1.7±0.9, p=0.32, respectively) . For post-procedural IVUS findings, there were no significant differences in minimum stent cross-sectional area (CSA), maximum stent CSA, radial stent symmetry index, and axial stent symmetry index (13.5±3.9 mm^2 vs. 14.6±4.5 mm^2, p=0.39, 22.9±5.7 mm^2 vs. 24.1±6.1 mm^2, p=0.50, 0.84±0.04 vs. 0.78±0.14, p=0.11, and 0.60±0.12 vs. 0.63±0.19, p=0.59, respectively). Distal lumen CSA was significantly smaller in the ISR group (13.6±4.7 mm^2 vs. 20.1±7.3 mm^2, p< 0.05).
Conclusions: DES implantation in small vessels was associated with ISR.

TCT-545

Contemporary Safety and Effectiveness of Peripheral Endovascular Interventions and Lower Extremity Bypass Surgery in the Treatment of Symptomatic Peripheral Arterial Disease

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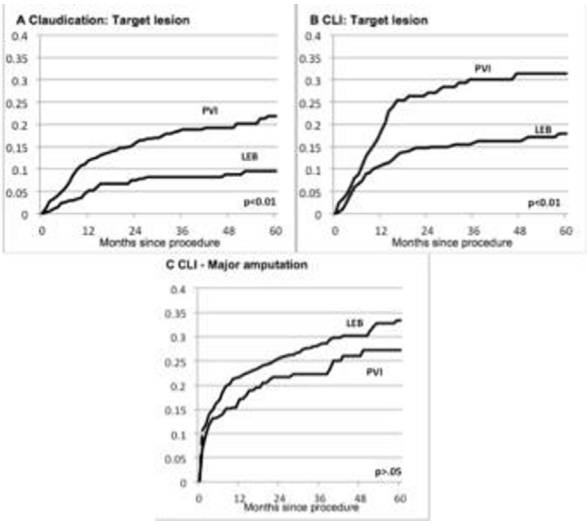
Background: Treatment for symptomatic peripheral arterial disease (PAD) includes peripheral endovascular interventions (PVI) and lower extremity bypass surgery (LEB). Limited comparative effectiveness data exists between the two therapies.
Methods: 1858 patients from two large integrated healthcare systems undergoing PVI (n=883) and LEB (n=975) for claudication or critical limb ischemia (CLI) from January 2005-December 31st, 2011 were examined. We examined the association between procedure type (PVI vs LEB) and 30-day post-procedure complications, subsequent target lesion revascularization (TLR) and major amputations.
Results: Patient undergoing PVI had lower rates of post-procedure complications than patients treated with LEB (11.9% vs. 37.1%, p< 0.01) In contrast, rates of TLR were greater for PVI compared to LEB in patients presenting with claudication (3 year TLR was 19.0% [95% CI 15.5, 22.5] and 8.3% [95% CI 5.2, 11.4] respectively, log-rank p< 0.001) and for patients presenting with CLI (3 year TLR was 31.6% [95%CI 25.2, 37.9] and 16.0% (95% CI 12.8, 19.2) respectively, log-rank p-< 0.01) (Figure 1). There were no differences in the rates of major amputations between the two groups in the CLI cohort (21.2% vs. 25.4%, p>0.05). Patterns were consistent when adjusted by inverse propensity score weights or within propensity-matched cohorts.



Conclusions: Conclusion: In patients with symptomatic PAD, revascularization by PVI was associated with less procedural complications but required reintervention more often than LEB. Limb salvage was similar whether endovascular or open strategies were pursued.

TCT-546

Predictors and Implications of Subintimal Tracking During Endovascular Revascularization of Chronic Total Occlusions in the Infrainguinal Arteries

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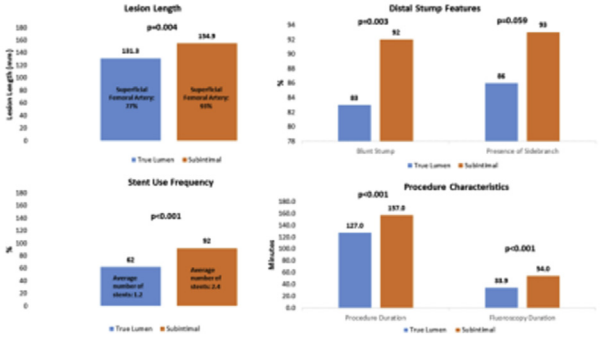
Background: Subintimal tracking and subsequent failure to re-enter the true lumen is a frequent cause of procedural failure in treating chronic total occlusions (CTO) of infrainguinal arteries.
Methods: 452 CTO lesions were treated between July 2005 and May 2014 from the multicenter Excellence in Peripheral Artery Disease (XLPAD) registry (NCT01904851). Angiography and intravascular ultrasound were used to confirm subintimal or true lumen crossing.
Results: True lumen crossing occurred in 72.6% and subintimal tracking in 27.4%. Baseline features, ankle-brachial index and Rutherford category were similar in both groups. Subintimal tracking was more frequent in longer lesions (154.9±72.9 mm vs. 131.3±76.4 mm; p=0.004), CTO with blunt distal stumps (92% vs. 83%; p=0.003), and presence of side branches at the distal stump (93% vs. 86%; p=0.059; Figure 1). Subintimal procedures were more frequently stented (92% vs. 62%), with a higher stent to lesion ratio (2.4 ± 1.1 vs. 1.2 ± 1.2), p< 0.001 for both. True lumen re-entry failed in 8%, and occurred more frequently in below-the-knee and heavily calcified lesions.



Conclusions: Subintimal tracking during infrainguinal arterial CTO crossing is more prevalent in long lesions, with blunt distal stumps and side branches, leading to extended procedure and fluoroscopy durations.

Cerebral Intervention (and Acute Stroke Therapies)

Washington Convention Center, Lower Level, Hall A

Saturday, September 13, 2014, 5:00 PM–7:00 PM

Abstract: 547

TCT-547

PERCUTANEOUS TRANSLUMINAL ANGIOPLASTY AND STENTING OF EXTRACRANIAL VERTEBRAL ARTERY STENOSES

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Background: To evaluate the safety and efficiency of vertebral angioplasty and stenting (VAS) in symptomatic patients.
Methods: 120 angioplasties in 114 pts (M:82) mean age 67,9 ± 6,8 years (22-84) left 69. All pts had multivascular diseases: carotid (CA):71, subclavian (SA): 33, coronary: 75. Atheromatous lesions: 116, inflammatory: 4. Mean lesion length: 9,5 +/- 2,9 mm. Mean % stenosis 83.6 ± 7.8, mean arterial diameter : 4,8 ± 0,6 mm (4-6). 112 lesions at VO segment (ostium), 6 at V1 and 2 at V2 segments. Indications for